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this comparison. For example, when the expression of one or more heat shock proteins is significantly greater in the presence of the candidate compound than in its absence, the candidate compound is identified as an inducer of one or more heat shock proteins. The cell, for example, can be of mammalian or human origin. The ability of the candidate compound to induce one or more heat shock proteins and/or downregulate or inhibit NF- $\kappa$ B activity can be determined by methods known to those of skill in the art. For example, the ability of a candidate compound to induce one or more heat shock proteins can be determined at the RNA level by Northern blot analysis or RT-PCR and at the protein level by immunoprecipitation or western blot analysis. The ability of a candidate compound to downregulate or inhibit NF- $\kappa$ B activity can be determined, for example, by electrophoretic shift assays, by detecting the expression of a protein known to be regulated by NF- $\kappa$ B, detecting the induction of a reporter gene (*e.g.*, an NF- $\kappa$ B regulatory element operably linked to a nucleic acid encoding a detectable marker, *e.g.*, luciferase,  $\alpha$ -galactosidase or chloramphenicol acetyl transferase (CAT)), or detecting a cellular response, for example, cellular differentiation, or cell proliferation.

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**IN THE CLAIMS:**

Please amend the claims, as follows:

Cancel claims 10, 11 and 18-21, without prejudice.

Amend claim 7 and 12-17 as follows:

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7. (amended) A method of inducing both cytoprotective and NF- $\kappa$ B inhibitory activities in a human comprising administering to a human in which such treatment is desired a therapeutically effective amount of a compound having a cyclopentenone ring structure, wherein said compound induces the expression of one or more heat shock proteins and downregulates or inhibits NF- $\kappa$ B activity.

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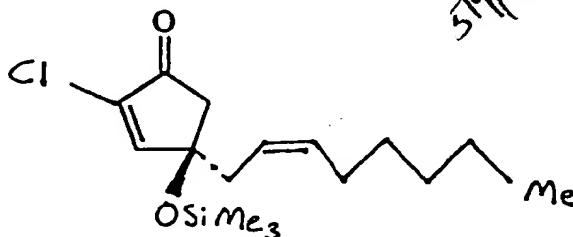
12. (amended) The method of Claim 5 or 7, wherein at least one of the heat shock proteins induced is HSP70.

13. (amended) The method of Claim 5, 6, or 7, wherein the human has an infectious disease.

- 9/11  
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- 424/559
14. (amended) The method of Claim 5, 6, or 7, wherein the human has an immune disorder.
15. (amended) The method of Claim 5, 6, or 7, wherein the human has cancer.
16. (amended) The method of Claim 5, 6, or 7, wherein the human has an inflammatory disorder.
17. (amended) The method of Claim 5, 6, or 7 wherein the human has an HIV infection, an influenza virus infection, a herpesvirus infection, a hepatitis B virus infection or a hepatitis C virus infection.

Add new claims 22-33, as follows:

- 7/12
22. (new) The method of claim 7, wherein the compound is not PGD<sub>2</sub>, PGA<sub>2</sub>, 15-deoxy-13,14-dihydroprostaglandin J<sub>2</sub>, Δ<sup>12</sup>-13, 14-dihydro-PGD<sub>2</sub>, or the compound depicted below.



23. (new) The method of claim 7, wherein the human is infected with a virus and said compound inhibits viral replication or ameliorates one or more symptoms associated with the infection.

24. (new) The method of claim 23, wherein the virus is a retrovirus, herpes virus, arenavirus, paramyxovirus, adenovirus, bunyavirus, coronavirus, filovirus, flavivirus,

hepadnavirus, papovavirus, picornavirus, poxvirus, reovirus, togavirus, or rhabdovirus.

25. (new) The method of claim 24, wherein the retrovirus is human T-cell lymphotropic virus (HTLV) or human immunodeficiency virus (HIV)).

26. (new) The method of claim 24, wherein the herpes virus is herpes simplex virus or Epstein-Barr virus.

27. (new) The method of claim 24, wherein the paramyxovirus is a morbillivirus virus or a pneumovirus.

28. (new) The method of claim 24, wherein the paramyxovirus is respiratory syncytial virus or mumps virus.

29. (new) The method of claim 24, wherein the hepadnavirus is hepatitis B virus.

30. (new) The method of claim 24, wherein the flavivirus is hepatitis C virus (HCV), yellow fever virus, or Japanese encephalitis virus.

31. (new) The method of claim 24, wherein the orthomyxovirus is influenza virus A, B or C.

32. (new) The method of claim 7, wherein the compound has a cyclopentenone ring structure and lacks a long aliphatic lateral side chain at position 4 or 5.

33. (new) The method of claim 7, wherein the compound has a cyclopentenone ring structure and lacks a long aliphatic lateral side chain at position 4 and 5.

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#### REMARKS

Applicants have amended the specification to correct inadvertent and obvious typographical and grammatical errors. A marked up version of the amendments to paragraphs